

REMARKS

Claims 1, 5-7, 21-22, 24-26 and 28-33 are pending in this application. By this Amendment, claims 1, 21, 22, 24 and 32-33 are amended for clarity. Various amendments are made to the claims for clarity and are unrelated to issues of patentability.

The Office Action objects to the drawings under 37 C.F.R. §1.83(c). The Office Action also rejects claims 1, 5-7, 21-22, 24-26 and 28-33 under 35 U.S.C. §112, first paragraph. This objection and rejection are respectfully traversed.

Both the objection and rejection are based on the previously claimed “generating a single data pulse and applying the single data pulse...second pulse width.” While applicant respectfully disagrees that the specification does not adequately describe the previously claimed subject matter, applicant has amended each of independent claims 1 and 24 to obviate the grounds for objection and rejection. In particular, each of independent claims 1 and 24 recites generating a plurality of data pulses and applying the plurality of data pulses to the address electrode lines, widths of the plurality of data pulses varying based on logic values of input data signals, wherein if one of the input data signals has a first logic value then the width of a corresponding one of the data pulses is varied to a first data pulse width and if one of the input data signals has a second logic value then the width of a corresponding one of the data pulses is a second data pulse width, wherein the first data pulse width is greater than the second data pulse width.

It is respectfully submitted that the drawings adequately show that the plurality of data pulses have varying widths based on the logic values of input data signals. See for example, the

pulses applied along the address electrode in Figure 6. The signals shown along the address electrode X correspond to a plurality of data pulses in which the width varies based on input data signals. Thus, applicant respectfully submits that the drawings and specification satisfy the Patent Office requirements including 35 U.S.C. §112, first paragraph.

While there is no current prior art rejections, applicant further believes that the previously recited references of U.S. Patent 6,407,510 to Yoo et al. (hereafter Yoo), U.S. Patent 6,603,449 to Kang et al. (hereafter Kang) and U.S. Patent 6,262,699 to Suzuki et al. (hereafter Suzuki) do not teach or suggest all the features of independent claims 1 and 24. In particular, Yoo discloses that an address electrode line may receive a main data pulse MDP as well as possibly receive an auxiliary data pulse ADP in addition to the main data pulse MDP. See Yoo's col. 3, lines 48-56. The main data pulse MDP and the auxiliary data pulse ADP are separately and independently generated. Therefore, Yoo's supplying of a main data pulse MDP and an auxiliary data pulse ADP have an increased power consumption as the two pulses MDP and ADP are generated independently. Because of the separate and independent generation of these pulses, Yoo does not teach or suggest generating a plurality of data pulses and applying the plurality data pulses to the address electrode lines where a width of the data pulses varies based on logic values of the input data signals. Rather, Yoo specifically discloses the addition of the auxiliary data pulse ADP based on a logic value of '0'. In other words, Yoo adds additional supplemental pulses based on the logic value. Therefore, Yoo does not teach the respective varying of the generated plurality of data pulses as recited in independent claim 1.

Furthermore, Kang's data pulses 41, 42, 45 and 46 in Figure 5 do not teach or suggest the features of independent claim 1 relating to the varying pulse widths of the data signal supplied to address electrode lines. Furthermore, there is no suggestion to modify Kang to include any type of overlap of scanning pulses as alleged in the September 21, 2004 Office Action.

For at least the reasons set forth above, independent claim 1 defines patentable subject matter. Independent claim 24 defines patentable subject matter for at least similar reasons.

Each of the dependent claims depends from one of the independent claims and therefore defines patentable subject matter for at least these reasons. In addition, the dependent claims also recite features that further and independently distinguish over the applied references. For example, dependent claim 21 (and similarly dependent claim 32) recites that when data is supplied N times to one of the address electrode lines, the data pulse width is a pulse width of N times of a pulse width of the first data pulse width with a logic value '1' minus the overlapped time period of the scanning pulses. Furthermore, dependent claim 22 (and similarly dependent claim 33) recites when data is not supplied N times to one of the address electrode lines, the data pulse width is a pulse width of N times of a pulse width of the second data pulse width with a logic value '0' plus the overlapped time period of the scanning pulses. The applied references clearly do not teach or suggest these features. Accordingly, these dependent claims define patentable subject matter at least for this additional reason.

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CONCLUSION

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Favorable consideration and prompt allowance of claims 1, 5-7, 21-22, 24-26 and 28-33 are earnestly solicited. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, **David C. Oren**, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
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